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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kenneth Ma

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GARLICK HARRISON & MARKISON

P.O. BOX 160727

AUSTIN, TX 78716-0727

EXAMINER

THOMAS, JASON M

ART UNIT

PAPER NUMBER

2423

NOTIFICATION DATE

DELIVERY MODE

10/15/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

MMURDOCK@TEXASPATENTS.COM
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GHMDocketing@cpaglobal.com

Office Action Summary	Application No. 10/829,498	Applicant(s) MA, KENNETH	
	Examiner Jason Thomas	Art Unit 2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 6, 2010 has been entered.

Response to Arguments

Applicant's arguments with respect to claims 12-39 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 12-14, 18, 26-28, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simmons et al., (U.S. Pub. No2001/0039659 A1) hereinafter Simmons, in view of Bonomi et al., (U.S. Pat. No. 6,769,127) hereinafter Bonomi,

Tsao, (U.S. Pub. No. 2003/0079016 A1) hereinafter Tsao, Richard Reisman, (U.S. Pub. No. 2003/0029900 A1) hereinafter Reisman, Reininger et al., (U.S. Pat. No. 6,404,738 B1) hereinafter Reininger, and Vitikainen et al., (U.S. Pub. No. 2003/0065802 A1) hereinafter Vitikainen.

Regarding claims 12 and 26: Simmons teaches a two part media system and method of operating such comprising: a media storage module 80 (see fig. 3) for storing media content; a media protection module 74 (see fig. 3) for protecting media content by, at least one, scrambling and encrypting the media content and for transmitting the protected media content over network 11 (see fig. 1); a media processing module 30 (see fig. 2) communicatively coupled (see [fig. 2, item 12]) to receive the protected media content over network 11 to enable playback of audiovisual programming stored by the media server, the media processing modules further including: a decryption module 61 (see fig. 2) for, at least one of, decrypting and descrambling the protected media content to produce un-protected media content; a media content decoder 60 (see fig. 2) for decoding the unprotected media content to produce decoded media content; and a display processor 40 (see fig. 2) for generating output video based upon the decoded media content.

Simmons however does not teach providing media delivery over a local network; wherein the media server is alternatively a network attachable/addressable storage (NAS) device; whether real-time playback is anticipated; or wherein the NAS employs Quality of Service (QoS) operations to

prioritize communications; wherein the NAS system determines end-to-end QoS for playback of the audiovisual programming by evaluating a content creation source, a transmission media, end device playback technology and media type; wherein the first part of the NAS evaluates a hierarchy of content creation sources, a hierarchy of transmission media, and a hierarchy of end device playback technology along with specified QoS requirements as a part of determining allocated bandwidth and transmission priority; and wherein the second part of the NAS system stores received audiovisual programming for playback on a playback device.

Bonomi teaches a media deliver system wherein it is well known that an IP network can be a local network which interconnects hardware units such that a media provision system can operate locally (see [fig. 3a], [col. 11, ll. 26-53]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify network on which the media delivery system operates, by operating it over a local network, as taught by Bonomi, in order to provide media delivery services for a private or internal setting such as a home or office which may use an intranet.

Tsao teaches wherein it is well known in the art to use a NAS device to perform the functions of a "non-conventional distributed video server" for the purpose of communicating, to a plurality of clients, media content which can be streamed to client devices, over a local area network or a wide area network, to meet the deliver constraints of concurrent video streams or even Video on

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Demand (VoD) (see [fig. 1a], [0006], [0007], [0021], [0031] where the ability to provide VoD services suggest the ability to support real-time playback).

Therefore it would have been obvious to one of ordinary skill in the art to modify the media servers of Simmons, by using the NAS devices, as taught in Tsao, when providing a media delivery system with the ability to store and deliver video on demand over a local network, because using a NAS system provides an inexpensive alternative to a conventional distributed video/media server (see [0005]).

Although both Simmons and Tsao anticipate streaming to provide VoD to client devices, neither defines streaming as a real-time feature to provide real-time playback. Reisman however teaches that real-time playback, using a system which anticipates the use of NAS devices is well known and accomplished by streaming, where streaming is synonymous with real-time streaming (see [0042], [0048], [0061], [0355] where the system anticipates using NAS devices in the same manner as TV and video servers for providing on-demand media content to clients). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the streaming capabilities, as taught by Simmons and Tsao, to include real-time streaming for real-time playback, as taught by Reisman, in order to provide viewers with a high quality on-demand video service, without having to wait for an entire movie to be downloaded prior to viewing, enabling viewers to enjoy what has come to be expected from the VoD experience.

Both Simmons and Reisman anticipate the need for quality and performance parameters but do not go into great detail about accomplishing such. Reininger, however, teaches a system which provides a dynamic allocation of bandwidth to control transmission quality priorities by using profiles and satisfaction indexes which evaluates a hierarchy (a highest satisfaction index) of content creation sources and transmission media to provide a desired of soft-QoS parameters (see [abstract], [col. 3, ll. 40-62], [col. 4, ll. 15-25], [cols. 4-5, ll. 60-8], [col. 6, ll. 46-56], [col. 7, ll. 5-11]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the means by which quality and performance parameters are established and implemented, by using a soft-QoS system to manage the bandwidth and transmission priorities, as taught in Reininger, in order to provide a dynamic means of guaranteeing the best quality for each and every client, as individually determined based on the client's network considerations while at the same time ensuring system efficiency (see [abstract], [col. 10, ll. 15-27])

While Reininger teaches considering the performance requirements of a client with respect to bandwidth considerations, the end device playback technology is not discussed.

Vitikainen however teaches providing a set of parameters associated with a receiving device so that the format of the video content which is transmitted, is formatted to comply with the receiving device (see [abstract], [0020], [0023], [0044], [0050]). Therefore, it would have been obvious to one of ordinary skill in

the art at the time the invention was made, to modify the means by which quality and performance parameters are established and implemented, by enabling the client device technology parameters, as taught in Vitikainen, to be considered as a factor of the hierarchical determinations made to provide a user defined QoS, as similarly taught in Reininger, because the quality of the content transmitted to an end device, is also a significant factor in determining the necessary settings to meet the requirements of a pre-established desired satisfaction index.

Regarding claims 13 and 27: The combined teachings of the aforementioned prior art teach the ability to record professionally recorded and distributed materials (see Bonomi [col. 8, ll. 35-54] for On-Demand delivery which consist of professionally recorded media), specified media resolution characteristics (see Bonomi [cols. 37, ll. 1-21] for resizing media to a specified media resolution), downloaded materials (see Bonomi [col. 1, ll. 37-45], [col. 6, ll. 20-36] where media content is downloaded over the internet), and personal recording through a home recording device (see Bonomi [col. 21, ll. 11-34] where subscribers can record video programs for later viewing) and providing a dynamic allocation of bandwidth to control transmission quality priorities by using profiles and satisfaction indexes which evaluates a hierarchy (a highest satisfaction index) of content creation sources and transmission media to provide a desired of soft-QOS parameters (see Reininger [fig. 4], [abstract], [col. 3, ll. 40-62], [col. 4, ll. 15-25], [cols. 4-5, ll. 60-8], [col. 6, ll. 46-56], [col. 7, ll. 5-11]).

Regarding claims 14 and 28: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the first part defines the hierarchy of transmission media including data packet networks, in-structure dedicated wired coupling, wireless communication links and further defines an associated bandwidth for each (see Reininger [abstract], [col. 3, ll. 40-62] for bandwidth adjustments to associate (renegotiate) a bandwidth based on wireless and wired connection requirements, see also [cols. 1-2, ll. 66-12] where such adjustments include that of data packet networks).

Regarding claims 18 and 34: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the NAS utilizes a proprietary formatting system to preclude reading of the stored materials by other devices (see Simmons [0040] where being “uniquely dynamically encrypted such that it can only be played back on the requesting player/receiver” reads on utilizing a proprietary format).

Regarding claim 35: The combined teachings of the aforementioned prior art teach the method of claim 34 further including, as a part of producing audiovisual programming in a digital media format, reconstructing the audiovisual programming into a non-proprietary and standard format (see [col. 17, ll. 31-35] where the media content can be stored in a proprietary format and also where the requesting device can request to receive the media content in a standard non-proprietary format such as an avi or mpg).

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2. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Simmons, in view of Bonomi, Tsao, Reisman, Reininger, Vitikainen and Bridgelall, U.S. Patent No. 6,895,255 B1 (hereinafter Bridgelall).

Regarding claim 33: The combined teachings of the aforementioned prior art do not teach wherein the transmission media includes at least one of a Bluetooth wireless network and an IEEE 802.11 standard protocol wireless network and wherein the method includes transmitting the audiovisual programming over one of the Bluetooth and 802.11 standard protocol wireless networks.

Bridgelall teaches a dual mode wireless data communication device which is capable of transmitting data on both Bluetooth and IEEE 802.11 signals (see [abstract], [col. 1, ll. 50-61]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to provide the capability to communicate data over either Bluetooth and/or IEEE 802.11, as taught in Bridgelall, when providing a system capable of providing data over a wireless signal, because both IEEE 802.11 and Bluetooth are useful for wireless networking (see [col. 1, ll. 15-33]).

3. Claims 15, 16, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simmons, in view of Bonomi, Tsao, Reisman, Reininger, Vitikainen Gerszberg et al., U.S. Patent No. 6,452,923 B1 (hereinafter Gerszberg) and Kim, U.S. Pre-Grant Pub. No. 2002/0082057 A1 (hereinafter Kim).

Regarding claims 15 and 29: The combined teachings of the aforementioned prior art teach providing multimedia content to devices based on the device parameters in a type of hierarchical form such that the capability of the receiving device determines the quality level or type of transmitted multimedia content (see Vitikainen [abstract], [0007-0009]) but does not teach doing so with an standard display TV, high definition TV, portable digital video recorder, wired high fidelity sound system, wireless headphones, wired headphones and handheld display devices however Reisman teaches where the use of a standard or high definition (SD/HD) Television, PVR and PC monitor are well known means of displaying media contents (see e.g. Reisman [0060], [0078], [0099], [0185]).

Gerszberg teaches using a speaker system capable of broadcasting high fidelity sound (see [col. 9, ll. 34-43] where using a hi-fi system is well known in the art to transmit high quality audio).

Kim teaches where the use of wired and wireless headphones are a well known means of presenting media to listeners (see [5-8]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to provide a means for establishing a level or type of media transmissions, as taught in Reininger when servicing receiving devices such as stand television, portable PVRs, or handheld display devices, as taught in Itoh, or HDTVs as taught in Smith, or hi-fi sound systems, as taught in Gerszberg, or wired and wireless headphones as taught in Kim, because these

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types of display and auditory devices are well known in the art to be used to present media to users.

Regarding claims 16 and 30: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the hierarchy of end device playback technology further includes associated display resolution parameters (see Bonomi [col. 37, ll. 1-21] where associates a display resolution with the resized media which is transmitted).

4. Claims 17, 19-23, 25, 31 and 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Simmons, in view of Bonomi, Tsao, Reisman, Reininger, Vitikainen and Rudd, U.S. Pre- Grant Pub. No. 2002/0152173 (hereinafter Rudd).

Regarding claims 17, 22, 23, 31 and 37: The combined teachings of the aforementioned prior art do not teach the content and transmission media aware NAS system wherein the NAS evaluates digital rights management parameters to evaluate whether a public key infrastructure (PKI) code is enabling and whether the end device is an authorized device for the PKI code.

Rudd teaches a system which is capable of evaluating digital rights management (DRM) parameters to determine if a device is an authorized device based on public key information such that only an authorized device (which can regulate usage according to the DRM parameters) can receive (copy) an original electronic work (see [236], [237], [616-621]). At the time the invention was made, it would have been obvious to one of ordinary skill to use such DRM parameters, as taught in Rudd, when designing a system which provides media content to

clients, because by using digital rights management the electronic works which are stored the use of the clients can be controlled and protected (see [3]).

Regarding claim 19: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the NAS evaluates previous playback to prevent the same file from be played by more than one device at any time including the NAS only producing to one device at a time (see Simmons [abstract] for a media system capable of storing and delivering media; see also Tsao [abstract] where a NAS device is used as a media server; see also Rudd [abstract] where only one original work can exist at a given time).

Regarding claim 20: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the NAS is operable to produce a subsequent copy to any playback device only after determining that a previously produced copy has been, removed, deleted, or destroyed (see Rudd [33] for the concept of the creation of a new original file if the previous original was destroyed).

Regarding claim 21: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the NAS is operable delete a file copy in conjunction with producing the file to another device if the other device has file storage capacity (see Rudd [3], [7], [abstract] for the ability to move a file from one location to another which requires

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creation of a new original and the deletion of previous original such that only one original work exist at a given time).

Regarding claim 25: The combined teachings of the aforementioned prior art teach the content and transmission media aware NAS system wherein the NAS is operable register the ripping or copying status into a central repository to disable user ripping the same content again in another network unless the first copy is deleted from the NAS (see Rudd [abs], [3] for where the device has a central repository which is used to control all actions to be performed on an electronic work).

5. Claims 24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simmons, in view of Bonomi, Tsao, Reisman, Reininger, Vitikainen and Greaves et al., U.S. Patent No. 6,185,688 B1 (hereinafter Greaves).

Regarding claims 24 and 32: The combined teachings of the aforementioned prior art do not teach the content and transmission media aware NAS system wherein the NAS is operable prevent files from being streamed or played outside of a home network boundary.

Greaves teaches a system capable of effectively inhibiting unauthorized use of a computer outside of an authorized (home) network environment (see col. 1, ll. 42-65]). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to provide a means of preventing file access outside of a home network boundary, as taught in Greaves, when providing a computing device which is capable of storing and delivering media content, as

taught in Simmons, because personal media content created and stored for later delivery to members of a home should not be available to individuals outside of the home network for the privacy of the household members.

6. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Simmons, in view of Bonomi, Tsao, Reisman, Reininger, Vitikainen and Iverson, U.S. Patent No. 6,052,379 (hereinafter Iverson).

Regarding claim 36: The combined teachings of the aforementioned prior art do not teach the method of claim 26 further including providing port based bandwidth priority wherein a device producing digital media on a first port is given priority over a device producing digital media on a second port.

Iverson teaches a priority scheme for assigning priority to a port (see [col. 1, ll. 66-11], [claim 1]). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use such a scheme or prioritizing ports, as taught in Iverson, when providing a means of delivering data requiring a portion of bandwidth to a client, as taught in the aforementioned art, because the method of prioritizing ports can provide a more efficient way to transmit multiple outputs of data streams.

7. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Simmons, in view of Bonomi, Tsao, Reisman, Reininger, Vitikainen and Mangold et al., U.S. Patent No. 6,668,324 B1 (hereinafter Mangold).

Regarding claim 38: The combined teachings of the aforementioned prior art do not teach the method of claim 37 wherein the NAS only produces

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audiovisual programming having copy restrictions to a PKI enabled device that does not have copying capability for making permanent copies of the audiovisual programming.

Mangold teaches a device which can not make any copies such that after the device has received data (such as video) the data gets thrown away (see [col. 10, ll. 45-55]). At the time the invention was made, it would have been obvious to one of ordinary skill in the art to only send media content to a device that can not copy or save data, as taught in Mangold, when providing a system capable of delivering media content to clients, as taught in Simmons, because by only sending the media content to devices that cannot reproduce or save the media content the sender has effectively provided an alternative means protect data from unauthorized use (see [col. 1, ll. 18-25], [col. 1, ll. 46-48]).

8. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Simmons, in view of Bonomi, Tsao, Reisman, Reininger, Vitikainen and Ananda et al., U.S. Patent No. 6,931,549 B1 (hereinafter Ananda).

Regarding claim 39: The combined teachings of the aforementioned prior art do not teach the method of claim 37 wherein the NAS evaluates safety of a transmission link and, based upon the evaluated safety of the transmission link, provides a specified amount of protection for audiovisual programming which is to be propagated over the transmission link.

Ananda teaches a means of verifying the transmission link between two computers, evaluating the safety and providing protection for the data which is to

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be exchanged over the link (see [abstract], [col. 9, ll. 7-26], [col. 9-10, ll. 61-15]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to provide a means of verifying the integrity of the transmission link, as taught in Ananda, when transmitting media content which is privately owned, as taught in the combined teachings of the aforementioned art, because without providing a secure means of transferring data from one computer to another it is possible for public clients to intercept private communications.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Thomas whose telephone number is (571) 270-5080. The examiner can normally be reached on Mon. - Thurs., 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Koenig can be reached on (571) 272-7296. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J. Thomas

/Andrew Y Koenig/
Supervisory Patent Examiner, Art Unit 2423